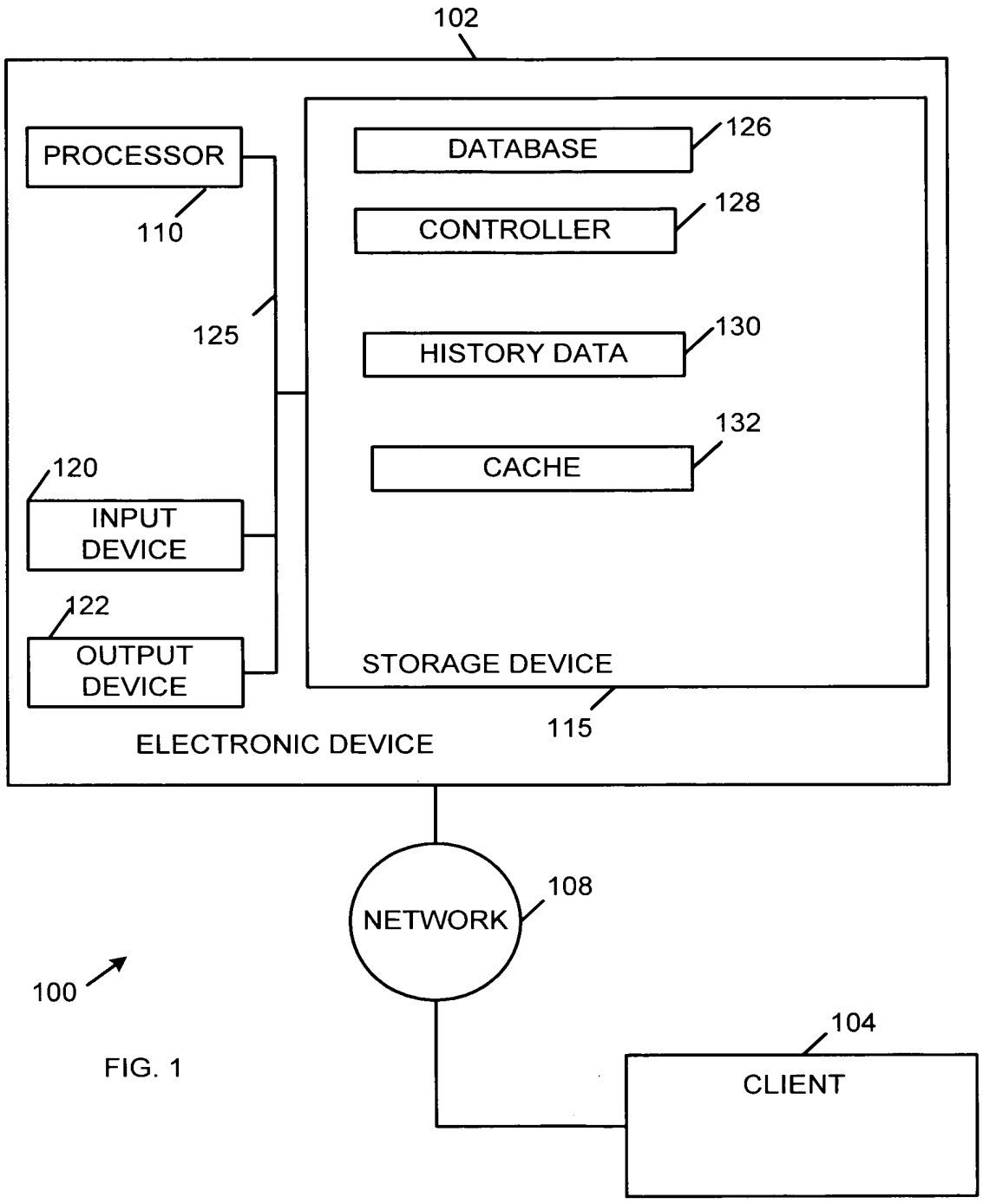
102
PROCESSOR
110
125
DATABASE
126
CONTROLLER
128
HISTORY DATA
130
CACHE
132
120
INPUT DEVICE
122
OUTPUT DEVICE
STORAGE DEVICE
115
ELECTRONIC DEVICE
NETWORK
108
100
104
CLIENT

FIG. 1

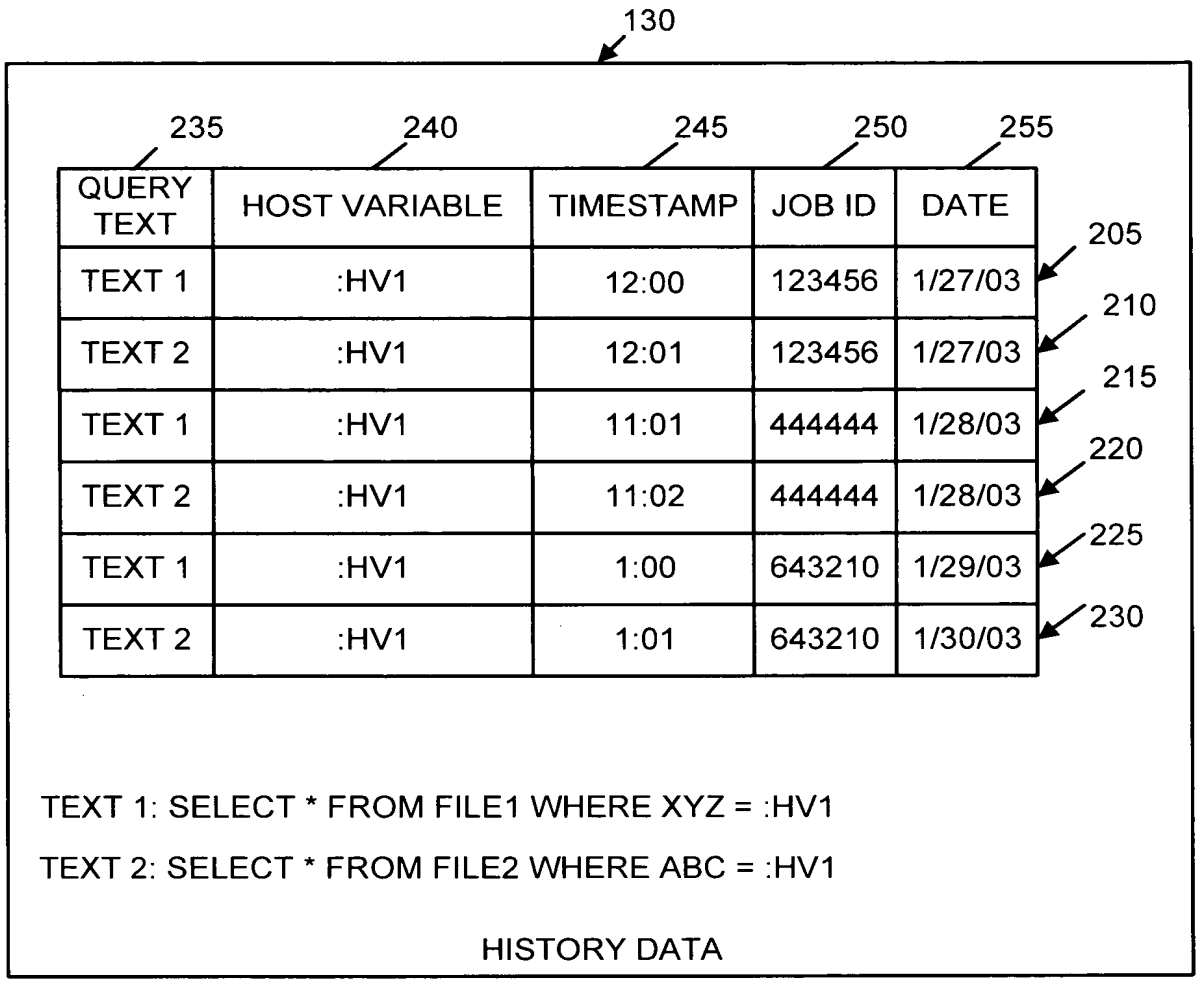
130
235
240
245
250
255
QUERY TEXT
HOST VARIABLE
TIMESTAMP
JOB ID
DATE
TEXT 1 :HV1 12:00 123456 1/27/03
TEXT 2 :HV1 12:01 123456 1/27/03
TEXT 1 :HV1 11:01 444444 1/28/03
TEXT 2 :HV1 11:02 444444 1/28/03
TEXT 1 :HV1 1:00 643210 1/29/03
TEXT 2 :HV1 1:01 643210 1/30/03
205
210
215
220
225
230
TEXT 1: SELECT * FROM FILE1 WHERE XYZ = :HV1
TEXT 2: SELECT * FROM FILE2 WHERE ABC = :HV1
HISTORY DATA

FIG. 2

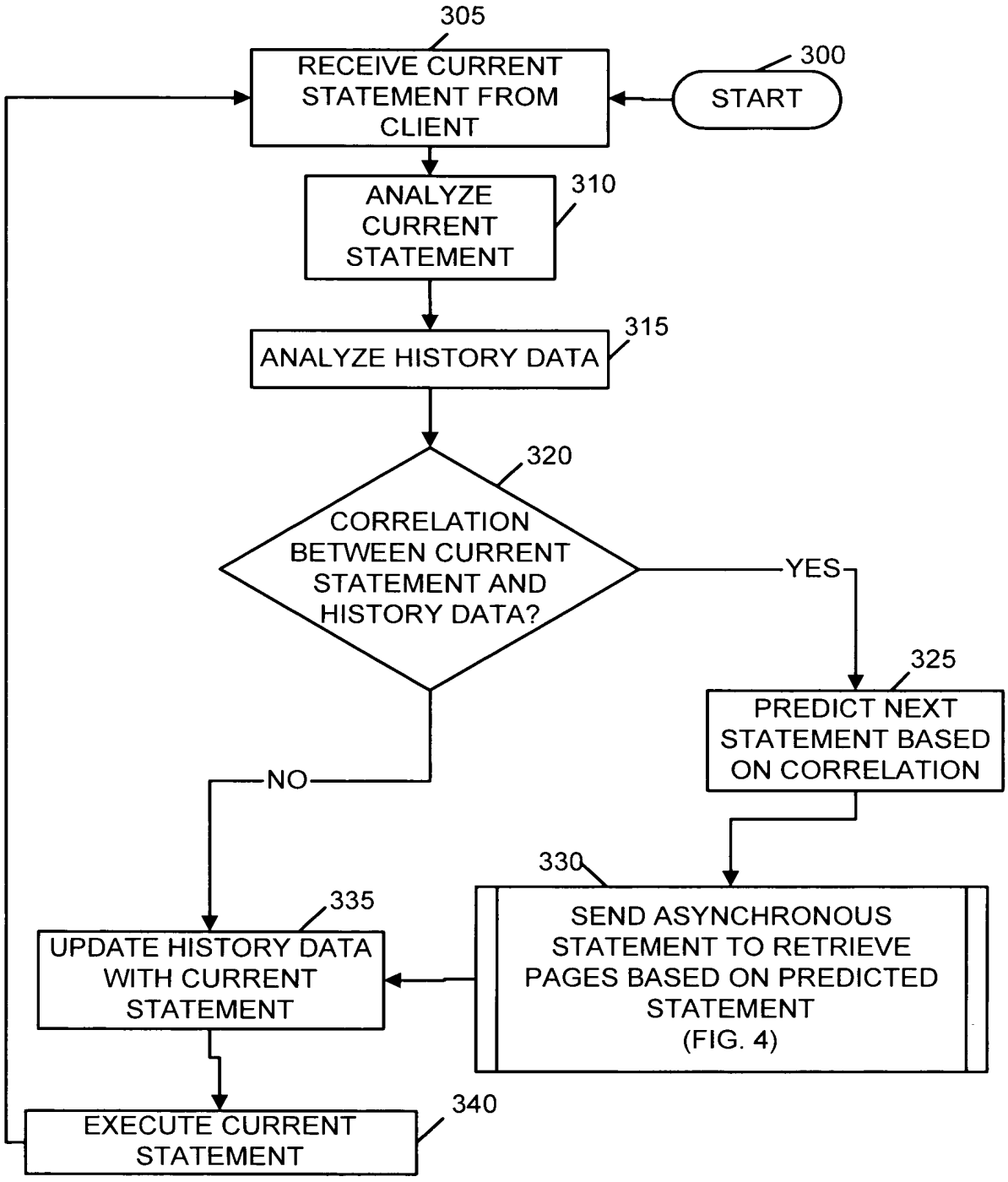
305
RECEIVE CURRENT STATEMENT FROM CLIENT
300
START
ANALYZE CURRENT STATEMENT
310
ANALYZE HISTORY DATA
315
320
CORRELATION BETWEEN CURRENT STATEMENT AND HISTORY DATA?
YES
NO
325
PREDICT NEXT STATEMENT BASED ON CORRELATION
330
SEND ASYNCHRONOUS STATEMENT TO RETRIEVE PAGES BASED ON PREDICTED STATEMENT (FIG. 4)
335
UPDATE HISTORY DATA WITH CURRENT STATEMENT
EXECUTE CURRENT STATEMENT
340

FIG. 3

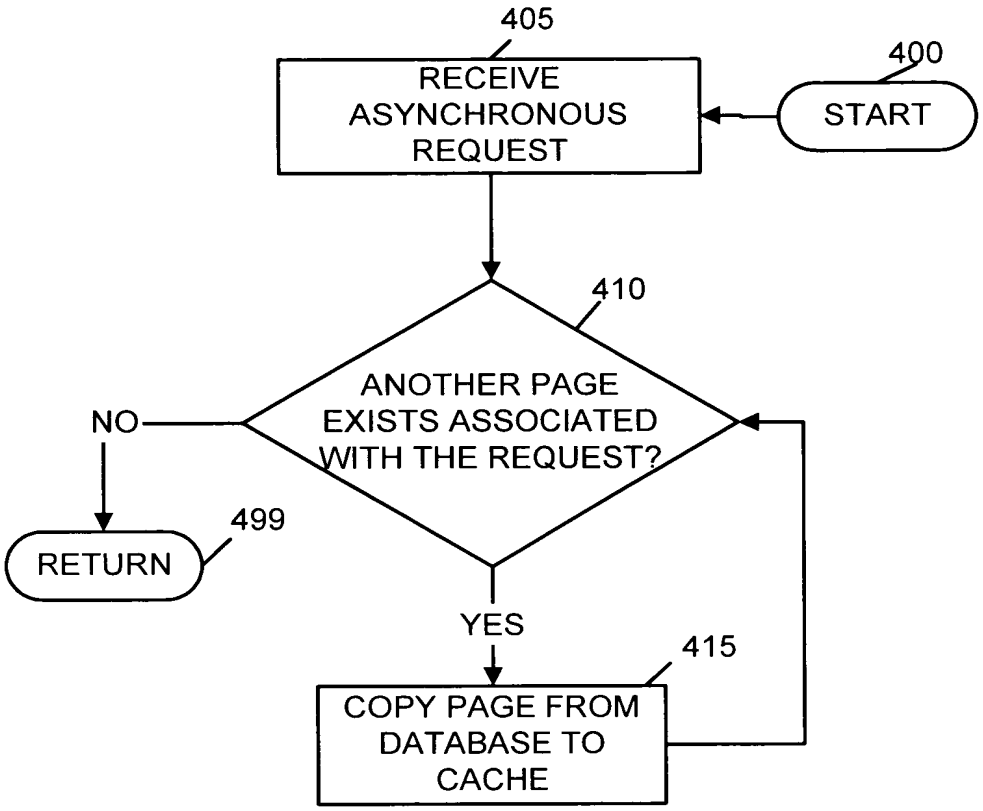
405
RECEIVE ASYNCHRONOUS REQUEST
400
START
410
ANOTHER PAGE EXISTS ASSOCIATED WITH THE REQUEST?
NO
499
RETURN
YES
415
COPY PAGE FROM DATABASE TO CACHE

FIG. 4